



FOUNTAIN RUN WATER DISTRICT

PWSID #0860141

Water Quality Report

January 1 through December 31, 2014



Introduction

We are pleased to present to you this year's Annual Quality Water Report. This report is to inform you about the quality water and services that we deliver each day. Our mission is to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of your water remains at the highest level and the price at the lowest level as we meet the needs of our community.

What Is the Source of My Drinking Water?

Our primary source of water is Glasgow Water Company. Glasgow Water Company provides water to the Fountain Run Water District through the Barren River Reservoir Treatment Plant located in Lucas, KY. This plant treats surface water from the Barren River Lake. The Barren River Plant has one KPDES permitted discharger, an underground storage tank, agricultural chemical users and oil and gas wells that could be possible sources of contamination.

Our secondary source is water purchased from the Monroe County Water District. The Monroe County Water District purchases water from Tompkinsville Water Works. The water source is Tompkinsville City Lake (classified as surface water) has two KPDES permitted dischargers in the recharge area, agricultural chemical users, oil and gas wells that could be possible sources of contamination.

Source Water Assessment(s) with a summary of each systems' susceptibility to potential sources of contamination are available for inspection at the Barren River Development District, (270) 781-2381, located at 177 Graham Avenue, Bowling Green, KY 42102.

How Can I Get Involved?

We want our valued customers to be informed about their water utility. You are invited to attend our regularly scheduled board meetings. Board meetings are held monthly on the third Tuesday 7 pm local time (Mar - Oct) & 6 pm (Nov - Feb) at the District's office located at 226 Main Street, Fountain Run 42133. If you have any questions about this report or concerning your water utility, please call (270) 434-4080; office hours are Mon - Fri 8 am to 5 pm. If at any time our customers witness any suspicious activities or potential water leaks, please call the office. Thank you.

Do I Need To Take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about their drinking water from their health care providers. Environmental Protection Agency (EPA) and the Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

Why Are There Contaminants in My Water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water before we treat it include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides or herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential areas.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can, also, come from gas stations, urban storm water runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

Information About Lead: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Fountain Run Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Important Definitions: **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology. **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety. **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There's convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants. **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs don't reflect the benefits of the use of disinfectants to control microbial contaminants. **Non-Detects (ND):** The contaminant was not detected at testing limit. **Variances and Exemptions:** State or EPA permission not to meet an MCL or a treatment technique under certain conditions. **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements a water system must follow. **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water. **Mg/L or ppm:** milligrams per liter or parts per million; **ug/L or ppb:** micrograms per liter or parts per billion; **pCi/L:** picocuries per liter; **NTU:** Nephelometric Turbidity Unit. **Turbidity:** A measure of the clarity of water that has no health effects however, turbidity can provide a medium for microbial growth. It is monitored because it is a good indicator of the effectiveness of the filtration system.

SECONDARY CONTAMINANTS				
Contaminant	Maximum Allowable Level	Report Level	Range of Detection	Date of Sample
Aluminum	0.05 to 0.2 mg/l	0.04 mg/l	0.03 to 0.04	G: Mar-14
Chloride	250 mg/l	24.2 mg/l	13.7 to 24.2	G: Mar-14
Corrosivity	Noncorrosive	-0.742	-0.742 to -0.779	G: Mar-14
pH	6.5 to 8.5	7.13	7.13 to 7.49	G: Mar-14
Sulfate	250 mg/l	10 mg/l	9 to 10	G: Mar 14
Sodium	Optimum level = 20 mg/L	G: 1.80 mg/l	G: 1.80 to 3.07	G: Mar 14

Secondary contaminants do not have a direct impact on the health of consumers and are not required in the CCR. They are being included to provide additional information about the quality of water.

Unregulated Contaminants Monitoring Rule 3 – List 1				
Contaminant	Average	Min - Max	Units	Max Date
Total Chromium	0.424	0 – 3.39	ppb	Aug 2013
Strontium	G: 69.725 M: 111.45	G: 49.20 – 84.60 M: 111.45 – 111.45	ppb	G: Nov 2013 M: Feb 2012
Vanadium	G: 0.282 M: 0.230	G: 0.00 – 0.49 M: 0.23 – 0.23	ppb	G: Aug 2013 M: Feb 2012
Chromium-6	G: 0.059 M: 0.035	G: 0.000 – 0.100 M: 0.035 – 0.035	ppb	G: Feb 2014 M: Feb 2012
Molybdenum	0.291	0.0 – 1.17	ppb	Nov 2013
Chlorate	30.95	0.0 – 87.6	ppb	May 2013

Glasgow Water Company has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by USEPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As customers, you have a right to know that this data is available. If you are interested in examining the results, please contact Tim Smiley, Glasgow Water Company, at 270.651.3727 or 126 East Public Square, Glasgow, KY 42141.

EPA has not established drinking water standards for unregulated contaminants. There are no MCL's and therefore no violations if found.

	Average	Range of Detection
Fluoride (added for dental health)	G: 0.80 M: 1.06	G: 0.60 to 0.80 M: 0.87 to 1.46
Sodium (EPA guidance level = 20mg/L)	G: 2.83 M: 1.79	G: 2.18 to 3.47 M: 1.79 to 1.79

Monroe County Water District's (MCWD) supplier, Tompkinsville Water Works (TWW), violated one or more drinking water standards in 2014. Even though these were not emergencies, as our customers, you have a right to know what happened and what was done to correct these situations. TWW had high turbidity in November 2014 which is *not* a health risk. Excessive manganese was found in the water causing turbidity to rise. TWW is reducing this by feeding Potassium Permanganate in the treatment process. There is nothing you need to do at this time. You do not need to use an alternative water supply (i.e. bottled water).

- + Copper: 90th percentile = 0.05 *and* Number of Sites above AL (1.3) = 0
- ++ Lead: 90th percentile = Non-Detect *and* Number of Sites above AL (15) = 0
- * Greater than 95% of samples must be <0.3NTU and never more than 1NTU.
- ** Monthly ratio is the %TOC removal achieved to the %TOC removal required. Annual average of the monthly ratios must be 1.00 to meet the TT.
- *** Highest running annual average for system.

This report is being published in the newspaper and will NOT be mailed to each individual customer, unless requested. Please contact our office should you like to obtain a copy of this report:

Fountain Run Water District
226 Main Street, P.O. Box 118
Fountain Run, Kentucky 42133

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that shall provide the same protection for public health. Fountain Run Water District, Monroe County Water District, and the Glasgow Water Company routinely monitor for contaminants in your drinking water according to Federal and State laws. This water report includes monitoring results from January to December 2014. In the absence of results for testing not required in 2014, the latest results have been provided.

THANK YOU to all our customers that have been good neighbors to the employees of the water system. The goal of the Fountain Run Water District is to provide quality water to every

tap. We ask that all of our customers help us protect our water system that is the heart of our community by reporting any suspicious activity or water leaks to our office at (270) 434-4080 or feel free to call with any questions.

In the table below, the Copper, individual site data for HAA5 and TTHM, and Chlorine are provided by the Fountain Run Water District (PWSID: KY0860141). FRWD also tests for Asbestos, Lead, and Total Coliform Bacteria; because these were at undetectable levels, they are not included within the table below. The remaining data is provided by the Glasgow Water Company and the Monroe County Water District utilizing the following key:

Glasgow Water Company (PWSID: KY0050929) - "G"
 Monroe County Water District (PWSID: KY0860150) - "M"
 Contaminant ~ [code] (units)

	Allowable Levels			Highest Single Measurement	Lowest Monthly %	Violation	Likely Source
Turbidity (NTU) TT* Representative Samples of filtered water	No more than 1 NTU; Less than 0.3 NTU in 95% monthly samples	-	-	G: 0.311 M: 1.940	G: 99 M: 89	G: No M: Yes	Soil runoff
REGULATED CONTAMINANTS							
Substance	Highest Level Allowed (MCL)	EPA Goal (MCLG)	Our Range	Highest Detection	Date of Collection	Violation (Yes/No)	Source of Contaminant
Microbiological Contaminants							
Arsenic [1005] (ppb)	10	N/A	G: 0.0 to 4.6	G: 4.6	G: Mar 14	No	Natural erosion; runoff from orchards or glass and electronics production wastes
Barium [1010] (ppm)	2	2	G: 0.02 to 0.02 M: 0.019 to 0.019	G: 0.02 M: 0.019	G: Mar 14 M: Feb 14	No	Discharge of drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	G: 0.6 to 0.8 M: 0.9 to 0.9	G: 0.8 M: 0.9	G: Mar 14 M: Feb 14	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen) [1040] (ppm)	10	10	G: 0.1 to 2.0 M: 0.9 to 0.9	G: 2.0 M: 0.9	G: Mar 14 M: Feb 14	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium [1045] (ppm)	50	50	G: 1.9 to 1.9	G: 1.9	G: Mar 14	No	Discharge from petroleum and metal refineries or mines; erosion of natural deposits
Copper + [1022] (ppm)	AL=1.3	1.3	0.001 to 0.07	0.05 (90 th Percentile)	Aug 13	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Radioactive Contaminants							
Combined radium (pCi/L)	5	0	G: 1.5 to 1.5 M: 2.5 to 2.5	G: 1.5 M: 2.5	G: Jan 14 M: Oct 14	No	Erosion of natural deposits
Disinfectants/Disinfection Byproducts and Precursors							
Total Organic Carbon (measured as ppm but reported as a ratio)	TT**	N/A	G: 0.86 to 2.13 M: 0.88 to 3.08 (Monthly ratios)	G: 1.49 M: 1.56 (lowest average)	G: 2014 M: 2014	No	Naturally present in environment
TTHM-Stage 1 (ppb) (all sites) [total trihalomethanes]	80	N/A	G: 11 to 75 M: 22 to 67 (range-system sites)	G: 43*** M: 39*** (system average)	G: 2014 M: 2014	No	By-product of drinking water disinfection
TTHM-Stage 2 (ppb) (individual sites) [total trihalomethanes]	80	N/A	30 to 80 (range-individual sites)	50*** (locational average)	2014	No	By-product of drinking water disinfection
HAA-Stage 1 (all sites) [haloacetic acids] (ppb)	60	N/A	G: 6 to 68 M: 25 to 68 (range-system sites)	G: 37*** M: 43*** (system average)	G: 2014 M: 2014	No	By-product of drinking water disinfection
HAA5-Stage 2 (individual sites) [haloacetic acids] (ppb)	60	N/A	12 to 68 (range-individual sites)	41*** (locational average)	2014	No	By-product of drinking water disinfection
Chlorine (ppm)	MRDL = 4	MRDLG = 4	0.42 to 0.92	0.92***	N/A	No	Water additive used to control microbes